

**Notice of Allowability**

Application No.

10/713,265

Examiner

Paul Huber

Applicant(s)

SHINTANI ET AL.

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2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-9.
3. ☒ The drawings filed on 17 November 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

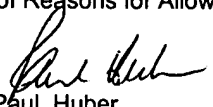
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 11172003
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
Paul Huber  
Primary Examiner  
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**EXAMINER'S AMENDMENT & REASONS FOR ALLOWANCE**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

In claim 8, line 6; "diving" was changed to --dividing--.

The claim was amended in order to correct the typographical error.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited on the PTO-892 each disclose an information recording apparatus that irradiates an information recording medium with an erasing light beam and a recording light beam.

The following is an examiner's statement of reasons for allowance: the prior art of record considered as a whole fails to teach or suggest an information recording apparatus that irradiates light to an information recording medium, of which recording layer is formed with a phase change layer, so as to record information, comprising: a light source; and **a dividing mechanism for dividing laser light, which is emitted from the light source and polarized in the same direction, into two light waves, wherein: the dividing mechanism includes a laser power ratio controller than controls a power ratio at which the laser light is divided; the two light have the first power that causes the temperature of the recording layer to be equal to or higher than the melting point, and the second power that causes the temperature of the recording layer to be equal to or higher than the temperature of atomic bond energy and fall below the melting point, respectively.** (bold language emphasized)

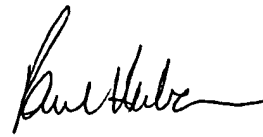
The prior art of record considered as a whole further fails to teach or suggest an information recording/reproducing apparatus that irradiates light to an information recording medium, of which recording layer is formed with a phase change layer, so as to record or reproduce information, comprising: a light source; a dividing mechanism for dividing laser light, which is emitted from the light source and polarized in the same direction, into two light waves, the dividing mechanism including a laser power controller that controls a power ratio at which the laser light is divided, and the two light waves respectively assuming the first power that causes the temperature of the recording layer to be equal to or higher than the melting point, and the power that causes the recording layer to be crystallized; a photo-detector for detecting light waves reflected from the information recording medium to which the two light waves are irradiated; and **a signal**

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**adding mechanism for converting the reflected light waves of the two light waves, which are detected by the photo-detector, into signals, and adding up the signals.** (bold language emphasized).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Huber whose telephone number is 703-308-1549.

A handwritten signature in black ink, appearing to read "Paul Huber", with a stylized, flowing script.

Paul Huber  
Primary Examiner  
Art Unit 2653

pwh  
August 24, 2004